

DRILL HOLES

BORDER REV: DATE: June 1, 2004

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## PROJECT DESCRIPTION

## I. GENERAL

This project involves the reconstruction of an existing Traffic Control Signal with interconnect at the intersection of MD 528 (Coastal Hwy) and Jamestown Road in Worcester County. The existing strain pole Traffic Signal is to be removed first and be replaced with a new mast arm Traffic Signal. Video camera detection shall be installed at this location. MD 528 (Coastal Hwy) is assumed to run in a north-south direction.

## II. INTERSECTION OPERATION

- The intersection shall continue to operate in a NEMA five-phase, semi-actuated mode, with the MD 528 (Coastal Hwy) approaches running concurrently. Exclusive/Permissive left turn / U turn phases shall continue to be provided for both approaches of MD 528 (Coastal Hwy). The pedestrian phase across the south leg of MD 528 (Coastal Hwy) shall include countdown peds and audible pushbuttons. A new countdown pedestrian phase with audible pushbuttons across the north leg of MD 528 (Coastal Hwy) shall be placed on actuation. The Jamestown Road approach shall continue to run in its own phase.
- The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection. Video interface shall be installed into the controller by SHA forces.
- SHA signal shop shall instal APS control unit into controller cabinet. The Contractor shall deliver the Control Unit and audible pushbuttons to the SHA Signal Shop for testing and programming.

## III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop. Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

The contact persons for District #1 are as follows:

Mr. Gene Cofield  
Assistant District Engineer - Traffic  
Phone: (410) 677-4040

Mr. Ed Rodenhizer  
Signal Shop  
410-787-7652

Mr. Jimmy Wright  
Assistant District Engineer - Maintenance  
Phone: (410) 543-6715

Mr. Sonny Bailey  
Sign Shop  
410-787-7670

Mr. Bruce Poole  
Assistant District Engineer - Utility  
Phone: (410) 677-4082

The power company representative is:

Mr. Richard L. Daff, Sr.  
Chief, Traffic Operations Division  
Phone: (410) 787-7630

Rodney Bain  
Connectiv  
2530 N. Salisbury Blvd  
Salisbury, MD 21802  
Phone: 410 860-6242

## EQUIPMENT LIST

## A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9001	Detector rack power supply (To be installed by SHA forces)	1 EA
9046	Detector rack retrofit.	1 EA
9086	Video detection interface equipment: 1-4 cameras (To be installed by signal shop).	1 EA
9571	Sheet aluminum signs to consist of: (mast arm)	65 SF
	D3-2 "Coastal Hwy" sign, (variable x 16") (dual faced)	1 EA
	D3-2 "Jamestown Rd" sign, (variable x 16") (dual faced)	2 EA
	R3-SL "LEFT TURN ONLY" sign, (30" x 36")	1 EA
	R10-12 MOD "U-TURN YIELD ON GREEN" sign (36" x 42")	1 EA
	R3-17 MOD "DIAMOND (SYMBOL) RIGHT LANE, Buses and Turns Only", sign (30" x 42")	2 EA
	Pedestrian pushbutton and R10-4(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS COASTAL HWY".) (9" x 15").	4 EA

## B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	2 EA
2002	Test Pit Excavation	6 C.Y.
5004	12" heat applied white permanent preformed thermoplastic pavement marking.	355 L.F.
5005	24" heat applied white permanent preformed thermoplastic pavement marking.	60 L.F.
6001	Standard type A combination curb and gutter 12" gutter pan 8" depth.	70 L.F.
6002	4" concrete sidewalk.	475 S.F.
8001	12" LED signal head section.	26 EA
8002	2 wire Central Control unit	1 EA
8004	8" LED signal head section.	9 EA
8008	Audible/tactile pedestrian pushbutton station & signs.	4 EA
8009	Breakaway Pedestal pole (10').	4 EA
8014	LED 16" countdown pedestrian signal head.	4 EA
8017	Mast arm pole and 60' mast arm any "T" dimension	1 EA
8022	Remove and dispose of existing material and equipment per assignment.	1 EA
8025	Twin mast arm pole and 50'/50' (outto 30') mast arms any "T" dimension.	1 EA
8026	Video detection camera & cable up to 500'	3 EA
8031	Disconnect, pull back and reroute cable.	700 L.F.
8033	Schedule 80 rigid PVC conduit up tp 4" - slotted.	60 L.F.
8034	Schedule 80 rigid PVC conduit up tp 4" - trench.	155 L.F.
8037	Detectable warning surfaces	36 S.F.
8038	Install overhead mounted sign.	65 S.F.
8040	No. 6 AWG stranded bare copper ground wire.	425 L.F.
8041	Weatherhead, 3 inch	2 EA
8043	Electrical utility service equipment (120/240 V, 60 amps)	1 EA
8044	Electrical cable 1-conductor No. 4 AWG THHN/THWN.	50 L.F.
8046	Furnish and install electrical handhole.	3 EA
8051	Cut, clean, galvanize and cap traffic signal structure.	1 EA
8053	Electrical cable - 2 conductor (No. 14 AWG).	465 L.F.
8055	Electrical cable - 5 conductor (No. 14 AWG).	585 L.F.
8056	Electrical cable - 7 conductor (No. 14 AWG).	1250 L.F.

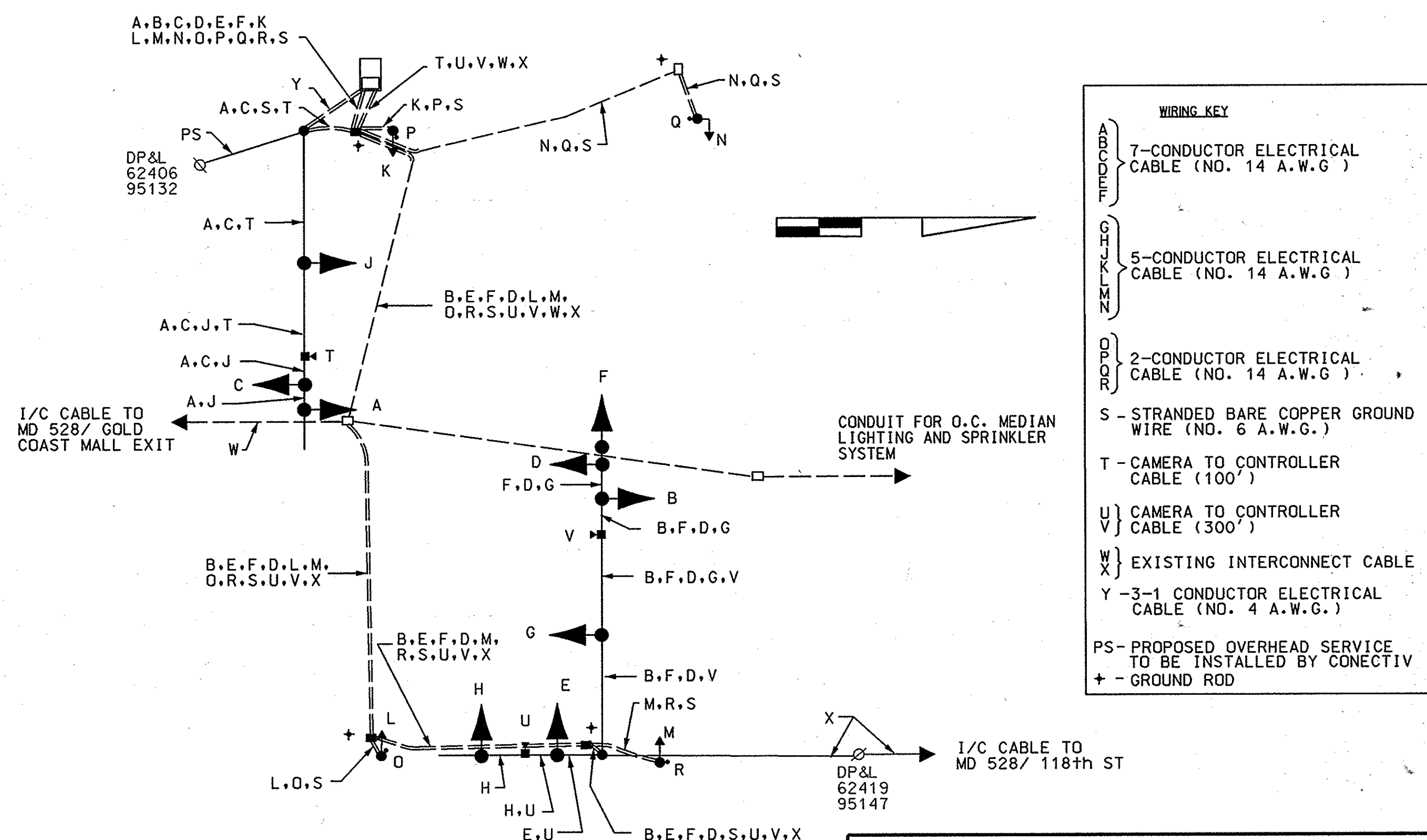
## C. EQUIPMENT TO BE REMOVED

All removed signal materials are to become property of the contractor.

## PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13
PHASE 1 & 5	←G→R	←G→R	R	←G→R	←G→R	R	R	R	R	DW	DW	DW	DW
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6													
PHASE 1 & 6	←G→G	←G→G	G	R	R	R	R	R	R	DW	DW	DW	DW
1 & 6 CHANGE	←Y→G	←Y→G	G	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 5	R	R	R	←G→G	←G→G	G	R	R	R	DW	DW	DW	DW
2 & 5 CHANGE	R	R	R	←Y→G	←Y→G	G	R	R	R	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	DW	DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	G	G	G	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	R	G	G	G	WK	WK	WK	WK
PED CLEAR	R	R	R	R	R	R	G	G	G	FL/DW	FL/DW	FL/DW	FL/DW
4 CHANGE ALT	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

## WIRING DIAGRAM



TOD NO: AT909-13  
SHA No.: WO442A52/C52  
MD 528 @ Jamestown Road



4913gl.dgn

D6-50

PLOTTED: WEDNESDAY, DECEMBER 13, 2006 AT 11:44:55 AM  
FILE: 4913GL.DGN

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION

MD 528 (COASTAL HWY)  
AND  
JAMESTOWN ROAD

SCALE NONE DATE 12/12/06 CONTRACT NO. AT9095185

DESIGNED BY R ZACHERL COUNTY WORCESTER  
DRAWN BY ROB CICCHINI LOGMILE 23052802.09  
CHECKED BY TMS NO. H121  
F.A.P. NO. TOD NO.

TS NO. DRAWING NO. 2 OF 2 SHEET NO. OF